DOCUMENT RESUME

ED 442 002 CE 080 299

AUTHOR Hubschman, Betty
TITLE How Do Different Types of Adult Learners Adapt to Distance Education?
PUB DATE 1999-04-22
NOTE 7p.; Paper presented at the Annual Meeting of the American Educational Research Association (Montreal, Canada, April 22, 1999).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Adult Education; *Adult Learning; Cognitive Style; *Distance Education; Educational Research; *Electronic Mail; *Graduate Students; Higher Education; Introductory Courses; Mentors; *Student Adjustment; *Teacher Student Relationship

ABSTRACT

A study concentrated on adult learners and their adaptability to electronic mail (e-mail). The sample (n=168) was composed of all graduate students taking an introductory educational research class during spring 1996 and graduate students taking a measurement and evaluation class during summer 1996 at a public state university. Students were randomly assigned to either an experimental and a control group. Both groups were taught how to use e-mail, and both groups received a minimum of four messages from the researcher. At the beginning of the term, all students were given the Hardy Educational Learning Profile instrument that evaluated learning profiles of interaction, approach, or information source for learning; preferred ways of gathering information; and preferred ways of processing information. The experimental group received more personal, caring (mentoring) messages; the control group received neutral messages that conveyed general information. Results indicated student responses of type of message sent were significantly higher in the mentored group; and inner-directed students replied more often than outer-directed students. (YLB)

Reproductions supplied by EDRS are the best that can be made
from the original document.

CE

ED 442 002

How do Different Types of Adult Learners Adapt to Distance Education?

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

B. Hubschman

1

Betty Hubschman, Ed.D.

Bhubschman@mail.barry.edu

Barry University

A paper presented at the

American Educational Research Association

1999 Annual Meeting

April 22, 1999

Montreal, Canada

BEST COPY AVAILABLE

CE030295

How do Different Types of Adult Learners Adapt to Distance Education?

Purpose, Rationale, and Background

As distance education is becoming more popular in academia, more information is needed on how to use it, and what types of students are best able to use distance education. Some students can only learn when they have an instructor in front of them. Will they be able to process the information if they're required to do this on their own?

Supporting distance education in the 1990s includes using a variety of distance learning methods, such as preproduced television courses, live delivery of two-way audio and video interactive lectures, web courses, and email contact (Annenberg/CPB Project, 1992). Verduin and Clark (1991, p. 32) feel that adult learners in particular should do well with distance education, since "adults like hands-on learning experiences... Adults can... learn most subjects if given enough time and attention, despite the differences in their learning rates and capacities."

As we approach the year 2000, we need to analyze what types of adult learners do best with distance education. Since distance education can be used in a variety of ways, this study deals with adult learners and their adaptability to electronic mail (e-mail). E-mail was chosen since it was the most accessible for the students. Most students had access to a computer, and could log onto a computer at least once a week to check their mail.

Subjects

The sample (n=168) was composed of all graduate students (four intact sections of approximately 25 students each) taking an introductory educational research class during the spring term of 1996, and graduate students (two intact sections of approximately 30 students each) taking a measurement and evaluation class during the summer term of 1996, at a public state university. Of the graduate students enrolled in the six classes, approximately 40% were elementary school teachers; the remainder was middle school, secondary, or adult educators. 84% of the students in this study were female.

Instruments and Design

The Hardy Educational Learning Profile (HELP) was a self-administered and self- scored learning style instrument designed especially for adult populations (Hardy, 1995). The HELP

instrument evaluated learning profiles of interaction, approach, or information source for learning (outer directed or inner directed); preferred ways of gathering information (concrete or abstract); and preferred ways of processing information (objective or subjective).

Internal consistency reliability coefficients (using Cronbach's alpha) produced with an initial sample of 141 adults were .77 (Outer/Inner Scale), .88 (Concrete/Abstract scale), and .82 (Objective/Subjective scale) (Hardy, 1995). A later study using 731 adults produced similar coefficients of .79, .88, and .86 respectively.

An experimental design was used, with students randomly assigned to an experimental and control group. Both groups were taught how to use electronic mail (e-mail), and both groups received a minimum of 4 messages from the researcher. The experimental group received more personal, caring messages, while the control group received neutral messages that conveyed general information.

Procedure

All students were given the HELP instrument at the beginning of the term. Students self-scored their profiles, gave their raw scores to the researcher, and kept the worksheets and summary of cognitive learning styles which categorized the students according to interaction with others, and gathering and processing information styles.

For the experimental design of teaching style, all students were taught by the researcher, in the classroom and then in the computer lab, how to use electronic mail. The researcher met with all students in the computer labs (by class) one time. After that, the researcher was available after class to work with those students wanting more practice on using email from the computer labs. Also, information was given to those students who wanted to use e-mail from home or from their work location.

Students were randomly assigned to either an experimental or control group. The experimental group received longer, more personal messages from the researcher. The control group received neutral messages that relayed more general information.

Results and Conclusions

Table 1 shows the results of t-tests of the 168 students. Student responses of type of message sent (*mentoring*, or longer, more personal e-mail versus *neutral*, or general information) were

significantly higher in the mentored group. This corresponds to Cross's (1987, p. ix) analysis of a mentor:

> Although a typical adult enters an educational program with the desire to "get a degree" or learn job skills, on the way to the degree, many adults discover that the journey upon which they have embarked is full of surprises. In exploring previously unknown byways that are revealed to them as they travel, they discover goals never before considered and satisfactions not previously experienced. The mentor of adult learners is not so much interested in fixing the road as in helping the protégé to become a competent traveler.

Another significant difference was seen in the interaction style of the learner, as determined by the HELP instrument. Those students who were inner-directed (reserved and nonverbal; likely to reflect and listen) replied more often than those who were outer-directed (outgoing and verbal; likely to discuss and debate). This corresponds to the research, which states that e-mail might be a more comfortable outlet for expression of introverts' thoughts and feelings (Berge & Collins, 1995; Velayo, 1994). Inner-directed learners (introverts) replied more often, to a significant degree ($p < .05$) than those outer-directed learners (extraverts).

No significant differences were found in those students who preferred to gather information in a concrete or abstract way or to process information in an objective or subjective manner.

The students in the College of Education at this state university in 1996 were not required to use electronic mail for communication. One of the largest concerns of this researcher how to train students on the use of e-mail. One of the largest complaints of the students was that the e-mail was hard to master [on the university mainframe] and that they had no time to make it to the computer laboratory to log on and use e-mail.

The results of this study indicate that electronic mail seemed to have a significant value to those students who are inner-directed and who are given personalized mentoring messages. Those students who made the time to learn e-mail, or who already were using e-mail, benefited the most. As we approach the year 2000, many more novices are using e-mail on a regular basis. Further studies need to focus on the subjects involved (and should include students other than those in graduate educational research classes), instruments used (and should develop other ways of measuring student aptitudes and learning styles), on using the more sophisticated e-mail packages and the larger number of people using e-mail today, and on different types of distance learning (other than electronic mail).

Table 1

T-tests of Independent Variables and Number of Total Responses

Variable	Number	Mean	SD	t-value	sig
MESSAGE TYPE				2.71	.007*
Mentoring	100	3.86	5.12		
Neutral	68	2.00	2.89		
INTERACTION				2.01	.046*
Inner	75	3.87	5.31		
Outer	93	2.49	3.50		
GATHERING INFO				.56	.576
Abstract	31	2.77	3.38		
Concrete	137	3.18	4.65		
PROCESSING INFO				.33	.744
Subjective	114	3.18	4.87		
Objective	54	2.96	3.40		

N = 168

* $p < .05$

References

Annenberg/CPB Project. (1992). *Going the distance: A handbook for developing distance degree programs.* Bethesda, MD: PBS Adult Learning Service.

Berge, Z. L., and Collins, M. P. (Eds.). (1995). *Computer mediated communication and the online classroom: Higher Education.* Cresskill, NJ: Hampton Press, Inc.

Cross K. P. (1986). Forward. In Daloz, L., *Effective teaching and mentoring* (pp. ix-x). San Francisco: Jossey-Bass.

Hardy, C. R. (1995). An examination of the dimensionalities and common constructs of selected adult cognitive learning style instruments. (Doctoral dissertation, Virginia Polytechnic Institute and State University, 1995). *Dissertation Abstracts International, 56-05,* A1624.

Velayo, R. S. (1994) Supplementary classroom instruction via computer conferencing. *Educational Technology, 34(5),* 20-26.

Verduin, J. R., and Clark, T. A. (1991). *Distance education: The foundations of effective practice.* San Francisco: Jossey-Bass.